SCXI™-1382 Battery Pack

This guide describes how to install and use the SCXI-1382 battery pack with the SCXI-1000DC chassis.

The SCXI-1382 is a battery pack containing a 12 V sealed lead-acid battery with a capacity of 26 Ah at a 20 hr rate. This battery pack can power the SCXI-1000DC chassis when other power sources are unavailable. You can combine the SCXI-1383 with the SCXI-1382 to charge the SCXI-1382 or to operate in float mode for uninterruptable power to an SCXI-1000DC chassis. The SCXI-1383 is a constant voltage, current-limited charger.

There are two versions of the SCXI-1382 battery pack kit. One kit requires an SCXI-1383 and one does not. If the kit contains an SCXI-1383 power supply/float charger, refer to the *SCXI-1383 Power Supply/Float Charger Installation Guide and Specifications* document when setting up the system.

The most recent versions of all National Instruments documents are available for download at `ni.com/manuals`.

Conventions

The following conventions are used in this guide.

Note This icon denotes a note, which alerts you to important information.

Caution This icon denotes a caution, which advises you of precautions to take to avoid injury, data loss, or a system crash. When this symbol is marked on the product, refer to the *Read Me First: Safety and Electromagnetic Compatibility* document, shipped with the product, for precautions to take.

NATIONAL INSTRUMENTS™

What You Need to Get Started

To set up and use the SCXI-1382 battery pack, you need the following:

❑ SCXI-1382 kit
   – SCXI-1382 battery pack
   – Mounting bracket for the SCXI-1382 battery pack (attached to the battery pack)
   – Screws, 8-32 × 5/16 in. flathead
   – Screw, 6-32 × 1/4 in. flathead

Note Some kits also contain the SCXI-1383 power supply/float charger, a power cord U.S. 120 VAC/Japan 100 VAC, and the *SCXI-1383 Power Supply/Float Charger Installation Guide*.

❑ Required, sold separately
   – SCXI-1000DC chassis
   – Number 2 Phillips screwdriver

❑ Recommended, sold separately with country-appropriate power cord options
   – SCXI-1383 power supply/float charger

Before using the SCXI-1382 battery pack for the first time, charge it for at least 24 hours to reach the full charge capacity. Refer to the *Charging the Battery Pack* section for charging instructions.

Battery Pack Safety Information

Note Refer to the *Read Me First: Safety and Electromagnetic Compatibility* document before removing equipment covers or connecting or disconnecting any power or signal wires.

Caution The battery pack contains a sealed lead-acid, non-wet, nonspillable battery.

Do not ship the battery pack without proper packaging or if it is damaged. Retain the original packaging for future shipping.

Do not carry the battery pack onto a passenger plane. You must ship the battery pack as cargo.

Never expose the battery to fire or short-circuit the battery.

Do not use the battery pack if it appears damaged.

Always use the supplied charger to charge the battery pack. Follow the instructions in the documentation. You can obtain NI documents at ni.com or by contacting an NI sales representative.

Battery Disposal Information

After replacement, the original battery must be recycled or disposed of properly. In the U.S., call 1-800-RE-USE-Pb, or dispose of the battery pack with automotive battery scrap. In the European Union, for information about the available collection and recycling scheme and your nearest National Instruments Branch Office in a particular EU country, go to ni.com/environment/weee.

For additional information about Battery Directive compliance (Directive 2006/66/EC of the European Parliament and of the Council on batteries and accumulators and waste batteries and accumulators) and for end-user information, go to ni.com/environment/batterydirective.

Charging the Battery Pack

The SCXI-1382 battery pack requires 12 to 14 VDC and at least 3.7 A of power for at least 12 to 14 hours to reach a full charge. Charge the battery pack as soon as possible after use. If the battery is fully charged, it can power the SCXI-1000DC chassis for more than five hours. However, NI recommends that you charge the battery after every three hours of use to extend the life of the battery pack.

Note NI recommends using the SCXI-1383 power supply/float charger to charge the SCXI-1382 battery pack. Refer to the *SCXI-1383 Power Supply/Float Charger Installation Guide* for charging instructions.

Caution The battery pack contains a sealed lead-acid battery that contains toxic material (lead) and corrosive fluid (sulfuric acid). Charging can produce explosive gases. Do not charge the battery in gas-tight enclosures. Charge the battery in a well ventilated area away from sparks, flames, or smoke. Do not short the battery pack terminals, as this can cause an explosion or fire. Do not store the battery pack in a discharged state. Do not puncture, disassemble, mutilate, or incinerate the battery pack. Recycle the battery or dispose of the battery pack with automotive battery scrap. The battery charger dissipates heat. Use the charger in an area with ample air circulation.

Connecting the SCXI-1382 to the SCXI-1000DC Chassis

Caution Only qualified personnel should install the SCXI-1382 battery pack.

To connect the SCXI-1382 battery pack to the SCXI-1000DC, complete the following steps while referring to Figure 1:

1. Power off the SCXI-1000DC chassis by switching the power switch on the front panel to the O position.

2. Remove the four 8-32 × 7/16 in. screws that hold the mounting bracket to the SCXI-1382 battery pack.

3. Using the 8-32 × 5/16 in. and 6-32 × 1/4 in. screws, attach the mounting bracket to the SCXI-1000DC. Apply a torque of 1.2–1.4 N · m (10.5–12.3 lb · in.) to the screws to secure them.

4. Slide the battery pack assembly onto the mounting bracket and reinsert the four 8-32 × 7/16 in. screws. Apply a torque of 1.2–1.4 N · m (10.5–12.3 lb · in.) to the screws to secure them.

   The chassis and the battery pack are ready for electrical connections.

5. Connect the green DC power connector (P1) at the end of the cord on the SCXI-1382 battery pack to the corresponding connector (J1) on the rear panel of the SCXI-1000DC chassis.

Caution The SCXI-1382 battery pack connector, J2, is an input-only connector for the SCXI-1383 power supply/float charger. Do *not* connect the SCXI chassis to this connector.
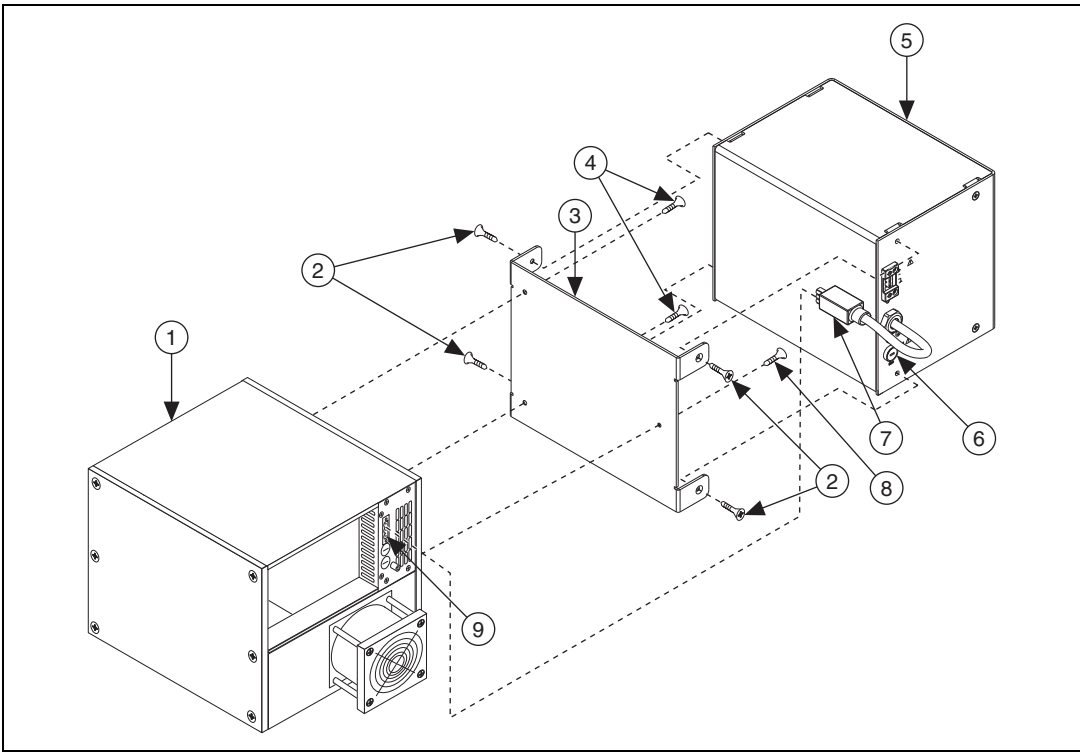
6. Power on the SCXI-1000DC chassis using the power switch on the front panel of the chassis.

Note If the SCXI-1000DC chassis does not power up, check the fuse (F3) on the SCXI-1382 battery pack.

Caution Always replace a bad fuse with a fuse of the same size and rating for continued fire protection.

1	SCXI-1000DC Chassis	4	8-32 × 5/16 in. Screws	7	P1
2	8-32 × 7/16 in. Screws	5	SCXI-1382 Battery Pack	8	6-32 × 1/4 in. Screw
3	Mounting Bracket	6	F3	9	J1

Figure 1. Connecting the SCXI-1382 to the SCXI-1000DC Chassis

Connecting the SCXI-1382 to the SCXI-1000DC Chassis and SCXI-1383 Power Supply/Float Charger in Float-Charging Mode

Note Refer to the *SCXI-1383 Power Supply/Float Charger Installation Guide* and the SCXI-1383 label for more information about the LEDs.

Caution Always power off the SCXI-1000DC and the SCXI-1383 before connecting or disconnecting to each other or to the SCXI-1382.
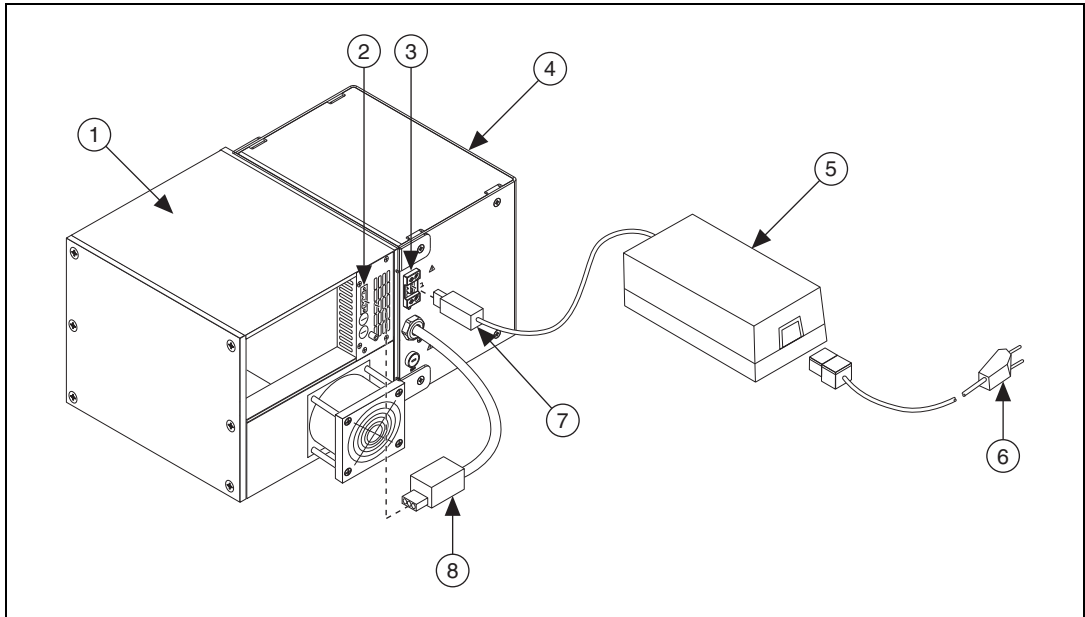
To connect the SCXI-1383 power supply/float charger to the SCXI-1000DC and the SCXI-1382 battery pack in float-charging mode, complete the following steps while referring to Figures 1 and 2:

1. Follow steps 1 to 6 in the *Connecting the SCXI-1382 to the SCXI-1000DC Chassis* section.

2. Connect the green DC power connector of the SCXI-1383 power supply/float charger (P2) to its corresponding connector (J2) on the rear panel of the SCXI-1382 battery pack.

3. Connect the IEC 320-style connector of the power cord to its mating connector on the SCXI-1383 power supply/float charger.

4. Connect the AC power plug of the power cord to a 100 to 240 VAC, 50/60 Hz power source. Switch on the AC power source.

The SCXI-1383 power supply/float charger is now powered up and is float-charging the SCXI-1382 battery pack.

5. Power on the SCXI-1000DC chassis using the power switch on the front panel.

Note While in float-charging mode, the green LED on the top of the SCXI-1383 case illuminates only if the battery is not fully charged.

1	SCXI-1000DC Chassis	4	SCXI-1382 Battery Pack	7	P2
2	J1	5	SCXI-1383 Power Supply/Float Charger	8	P1
3	J2	6	To VAC Power Source		

Figure 2. Connecting the SCXI-1382 in the Float-Charging Mode to the SCXI-1000DC Chassis and the SCXI-1383 Power Supply/Float Charger

Specifications

All specifications are typical at 25 °C unless otherwise specified.

Note For SCXI-1383 specifications, refer to the *SCXI-1383 Power Supply/Float Charger Installation Guide*.

Battery Pack

Battery type..Sealed lead-acid

Voltage ....12 V

Capacity at 20 hr rate ....26 Ah

Dimensions ....15.8 × 17.8 × 21.8 cm
(6.2 × 7 × 8.6 in.)

Weight ....11 kg (24 lb)

Environmental

Operating temperature ....0 to 50 °C

Storage temperature ....–20 to 70 °C

Humidity ....10 to 90% RH, noncondensing

Maximum altitude...2,000 meters

Pollution Degree ....2 (indoor use only)

Safety

This product meets the requirements of the following standards of safety for electrical equipment for measurement, control, and laboratory use:

- IEC 61010-1, EN 61010-1
- UL 61010-1, CSA 61010-1

Note For UL and other safety certifications, refer to the product label or the *Online Product Certification* section.

Electromagnetic Compatibility

This product meets the requirements of the following EMC standards for electrical equipment for measurement, control, and laboratory use:

- EN 61326 (IEC 61326): Class A emissions; Basic immunity
- EN 55011 (CISPR 11): Group 1, Class A emissions
- AS/NZS CISPR 11: Group 1, Class A emissions
- FCC 47 CFR Part 15B: Class A emissions
- ICES-001: Class A emissions

Note For the standards applied to assess the EMC of this product, refer to the *Online Product Certification* section.

CE Compliance $\mathsf{C}\,\mathsf{E}$

This product meets the essential requirements of applicable European Directives as follows:

- 2006/95/EC; Low-Voltage Directive (safety)
- 2004/108/EC; Electromagnetic Compatibility Directive (EMC)

Online Product Certification

Refer to the product Declaration of Conformity (DoC) for additional regulatory compliance information. To obtain product certifications and the DoC for this product, visit ni.com/ certification, search by model number or product line, and click the appropriate link in the Certification column.

Environmental Management

NI is committed to designing and manufacturing products in an environmentally responsible manner. NI recognizes that eliminating certain hazardous substances from our products is beneficial to the environment and to NI customers.

For additional environmental information, refer to the *NI and the Environment* Web page at `ni.com/environment`. This page contains the environmental regulations and directives with which NI complies, as well as other environmental information not included in this document.

Waste Electrical and Electronic Equipment (WEEE)

EU Customers At the end of their life cycle, all products *must* be sent to a WEEE recycling center. For more information about WEEE recycling centers and National Instruments WEEE initiatives, visit `ni.com/environment/weee`

电子信息产品污染控制管理办法 （中国 **RoHS**）

中国客户 National Instruments 符合中国电子信息产品中限制使用某些有害物质指令 (RoHS)。 关于 National Instruments 中国 RoHS 合规性信息，请登录 `ni.com/environment/rohs_china`。 (For information about China RoHS compliance, go to `ni.com/environment/rohs_china`.)